

Statistical spectrum of the non-Markovity parameter for simple model systems

Yulmetyev R., Khushnutdinov N.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The spectra of the non-Markovity parameter for three model systems are found: an ideal gas, weakly non-ideal gas and a medium in hydrodynamic limits. It is shown that the non-Markovian effects play the dominant role in all three above-mentioned cases. The effects of molecular memory are connected with the statistical appearance of intermolecular interactions in statistical systems.

<http://dx.doi.org/10.1088/0305-4470/27/16/006>
